

WHAT IS CLAIMED IS:

1. A battery, comprising:

an electrode assembly including a first electrode plate and a second electrode plate with a separator interposed therebetween, a first terminal portion and a second terminal portion

5 extending from the first electrode plate and the second electrode plate;

a pouch casing for housing the electrode assembly having an open portion;

a pouch cover formed of a metal material including at least one throughhole and at least an electrode pin fastened to the at least one throughhole, wherein the electrode pin is electrically connected to one of the first terminal portion and the second terminal portion and the pouch

10 cover is coupled to and seals the open portion of the pouch casing; and

a first lead and a second lead exposed outside the pouch cover, wherein the first lead and the second lead are electrically connected to the first terminal portion and the second terminal portion.

15 2. The battery of claim 1, wherein the electrode pin is insulated from the pouch cover and the first terminal portion is electrically connected to an inside portion of the pouch cover and the second terminal portion is electrically connected to an inside portion of the electrode pin.

20 3. The battery of claim 2, wherein the first lead is coupled to an outside portion of the pouch cover and the second lead is coupled to an outside portion of the electrode pin and the second lead is electronically insulated from the pouch cover.

4. The battery of claim 1, wherein the electrode pin includes a first electrode pin and a second electrode pin formed at locations corresponding to the first terminal portion and the second terminal portion, respectively,

wherein at least one of the first electrode pin and the second electrode pin is electronically insulated from the pouch cover, and

wherein the first terminal portion and the second terminal portion are electrically connected to an inside face of the first electrode pins and an inside face of the second electrode pin, respectively.

5. The battery of claim 4, wherein the first lead and the second lead are coupled to an outside face of the first electrode pin and an outside face of the second electrode pin, respectively, and

wherein at least one of the first lead and the second lead are electrically insulated from the pouch cover.

6. The battery of claim 1, wherein the metallic material is steel with a plated layer on its surface.

7. The battery of claim 1, wherein the metallic material is stainless steel.

8. The battery of claim 1, wherein a reinforcement member is coupled to at least one side of the electrode assembly.

9. The battery of claim 1, further comprising an insulating terminal cover including insertion holes for receiving the first terminal portion and the second terminal portion.

10. A battery, comprising:

5 an electrode assembly having a first electrode plate and a second electrode plate with a separator interposed therebetween, and a first terminal portion and a second terminal portion extending from the first electrode plate and the second electrode plate;

a pouch casing for housing the electrode assembly having an open portion;

10 a pouch cover formed of an insulating reinforced foil and coupled and sealing the open portion of the pouch casing, the pouch cover includes a first throughhole and a second throughhole at locations substantially corresponding to the first terminal portion and a second terminal portion, respectively, and a first electrode pin and a second electrode pin fastened to the first throughhole and the second throughhole, respectively,

15 wherein the first terminal portion and the second terminal portion of the electrode assembly is electrically connected to an inner face of the first electrode pin and an inner face of the second electrode pin; and

a first lead and a second lead electrically connected to an outer face of the first electrode pin and an outer face of the second electrode pin, respectively.

20 11. The battery of claim 10, wherein a reinforcement member is arranged on least one portion of the electrode assembly.

12. The battery of claim 10, further comprising:

an insulating terminal cover including insertion holes for receiving the first terminal portion and the second terminal portion.

13. A battery, comprising:

5 an electrode assembly including a first electrode plate and a second electrode plate and a separator interposed therebetween;

a reinforcement portion arranged on a portion of the electrode assembly;

a first terminal portion and a second terminal portion arranged on the first electrode plate and the second electrode plate, respectively;

10 a casing for housing the electrode assembly having an open portion;

a cover including at least one throughhole, wherein in the cover is fastened to the open portion;

an electrode pin fastened to the at least one throughhole, wherein the electrode pin is electrically connected to one of the first terminal portion and the second terminal portion; and

15 a first lead and a second lead exposed outside the pouch cover, wherein the first lead and the second lead are electrically connected to the first terminal portion and the second terminal portion.

14. The battery of claim 13, wherein the reinforcement portion includes a
20 reinforcement member for minimizing volumetric expansion of the battery assembly, and wherein the battery assembly is a wound configuration or stacked configuration.

15. The battery of claim 14, wherein the reinforcement member is arranged on a side portion of the battery assembly.

16. The battery of claim 14, wherein the reinforcement member is arranged on a top portion and a bottom portion of the battery assembly.

17. The battery of claim 14, wherein the reinforcement member is made of metal.

18. The battery of claim 18, wherein the metal includes stainless steel.

19. The battery of claim 18, wherein the casing includes metal.

20. The battery of claim 18, wherein the casing includes stainless steel.

21. The battery of claim 1, wherein the battery is a pouch type battery.

22. The battery of claim 10, wherein the battery is a pouch type battery.

23. The battery of claim 13, wherein the battery is a pouch type battery.